(Please add new Claim 23 as follows:)

23. The compound according to Claim 17 wherein t is 0 to about 2.

(Please add new Claim 24 as follows:)

24. The compound according to Claim 17 wherein R^6 is a substituted aromatic group.

A1 Cont.

(Please add new Claim 25 as follows:)

25. A composition comprising:

(a) the compound according to Claim 1; and

(b) a pharmaceutically acceptable carrier.

(Please add new Claim 26 as follows:)

26. A method selected from the group consisting of treating multidrug resistance, inhibiting transport protein activity, and combinations thereof, comprising administering to a mammal in need of such treatment or inhibition an effective amount of the composition according to Claim 25.

REMARKS

In view of the restriction requirement, Applicants have cancelled all previously pending claims without prejudice. Applicants have submitted new Claims 17 – 26 which are directed to the Examiner's newly drawn Group IV (as defined in the Office Action dated November 20, 2002). No new matter has been added.

Although all previously rejected claims have been cancelled, Applicants respond to the Examiner's objections and rejections in view of the newly submitted claims, as follows:

The Claim Objections

The Examiner has objected to now cancelled Claims 12 and 14 as being of improper dependent form. As these claims have been cancelled, and no new claims correspond to such cancelled claims, the objection is now moot and should be withdrawn.

The Rejections Under 35 U.S.C. § 112

The Rejection of Claims 1 and 5

The Examiner has rejected Claims 1 and 5 under 35 U.S.C. § 112, first paragraph, based on enablement. The Examiner states that the specification does not reasonably provide enablement for any and all "carbocyclic, hydrocarbon substituted or unsubstituted group." While Claims 1 and 5 are now cancelled, new Claims 17 – 26 recite carbocyclic and other groups. Applicants traverse this rejection and assert that the rejection should be withdrawn.

Applicants remind the Examiner that similar recitations related to the class of carbocyclic and other groups as currently set forth in the claims were previously allowed by the Examiner in the parent case. In this regard, Applicants refer the Examiner to now issued U.S. Patent No. 6,376,514.

Moreover, the Examiner appears to have based the rejection upon Applicants' own disclosure of particularly preferred limitations as set forth in the examples, including those which have been most often exemplified in the specification. However, there is no requirement that a patent applicant can claim only what is exemplified. There is absolutely no requirement that a patent applicant must disclose each and every compound claimed, nor is there a requirement that the breadth of an allowed claim should be limited to those compounds specifically exemplified in a patent application.

In framing the present rejection, the Examiner has failed to consider the proper test for enablement as set forth in MPEP 2164.08, which provides two stages of inquiry: 1) to determine how broad the claim is with respect to the disclosure; and 2) to determine if one skilled in the art is enabled to make and use the entire scope of the claimed invention without undue experimentation. The Examiner has not asserted that the claim is broader than the specification. Accordingly, the second stage of this inquiry remains to be addressed.

Applicants must respond to this rejection in view of the accepted legal standards for enablement. Indeed, there is no basis in patent law that requires an applicant to do more than describe the various inventive compounds, either generally or specifically, and disclose their putative use, without relying on undue experimentation (some necessary experimentation is appropriate). See MPEP 2164.01(c). Despite the Examiner's characterization, Applicants' specification is not without guidance to the ordinarily skilled practitioner. Addressing the requirement relating to "how to use," Applicants have provided more than adequate description in this regard. Applicants have provided numerous pages of examples of exemplary compounds, as well as descriptions of preferred substituent groups for almost every moiety of the claimed structures (see, for example, the numerous

disclosures of preferred embodiments disclosed on pages 10 – 16 of the specification, keeping in mind again that there is no basis in law that requires that a patent applicant is limited to preferred embodiments of an invention). These examples and preferred embodiments are merely illustrative of various ways in which the claimed compounds can be used – there is no statutory requirement for the disclosure of a specific example since a patent specification is not intended nor required to be a production specification. See MPEP 2165.02 (II) and *In re Gay*, 135 USPQ 311 (CCPA 1962). Even further, Applicants explicitly define certain terms such as "carbocyclic group" and "aromatic group," and the like, with specific disclosures regarding ring size and character of ring systems. One of ordinary skill would readily understand the scope of the invention without explicit exemplification of each and every compound within these classes. Indeed, to require Applicant to do so would be an undue, and legally impermissible, burden for the Examiner to impose.

Moreover, regarding the "how to make" requirement, Applicants dedicate almost *45 pages* of specifications regarding how one of ordinary skill could make the presently claimed compounds. The specifications relate to a variety of compounds having a variety of different groups, including carbocyclic and other groups.

Accordingly, while the state of art may be relatively unpredictable relative to other arts, this element of unpredictability should not preclude Applicants from claiming the subject matter to which they have described and are entitled. The reason for this is that Applicants have provided the ordinarily skilled artisan with ample disclosures regarding the recited compounds, as well as methods for testing the efficacy of such compounds. Indeed, Applicants have provided broad disclosures, numerous preferred embodiments, and specific examples, all of which differ in various respects, as well as numerous assays to test the activity of the described compounds. In this respect, it is again reiterated that there is absolutely no requirement that the Applicant exemplify each and every compound within the claimed invention. If the Examiner persists in this rejection, the Examiner should provide a legal basis for her position regarding such a requirement.

For all of the above reasons, Applicants therefore respectfully request that the Examiner reconsider and withdraw the rejection of the claims based on enablement, because Applicants have provided ample directive disclosure in this respect.

The Rejection of Claims 3 and 6

The Examiner has rejected Claims 3 and 6 based on the specific use of "about" as set forth in those claims. Applicants have cancelled Claims 3 and 6. Moreover, in the newly presented claims,

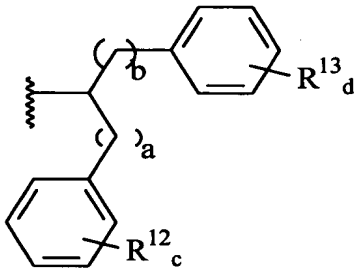
Applicants have not included such usage. For example, rather than referencing "c is *about* 1 to about 3" and "d is *about* 1 to about 3," new Claim 17 recites that "c is 1 to about 3" and "d is 1 to about 3." The rejections are therefore moot and should be withdrawn.

The Rejection of Claim 15

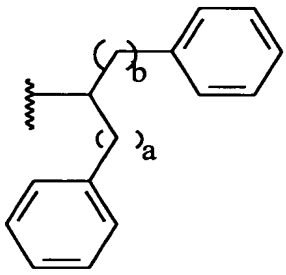
The Examiner has rejected Claim 15 based on definiteness, and suggests that insertion of the term "effective amount of" would overcome this rejection. While Claim 15 is now cancelled, newly added Claim 26 comprises administering to a mammal in need of such treatment or inhibition *an effective amount of* the referenced composition. The rejection is therefore moot and should be withdrawn.

The Rejections Under 35 U.S.C. § 102(b)

The Examiner has rejected Claims 1 – 6 and 9 as being anticipated by DE 3524955 and FR 2567885 (which appear to be the same reference). As Claims 1 – 6 and 9 are now cancelled, Applicants respond to this rejection in view of newly added independent Claim 17 (upon which all other new claims depend). Claim 17 requires that each R^2 is selected from:



and

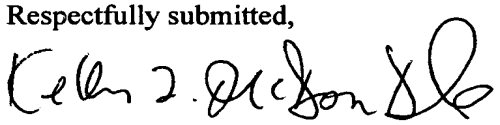


wherein a is at least about 2 and b is at least about 2. Accordingly, R^2 cannot be a diphenylmethyl group as exemplified in the cited reference (a diphenylmethyl group would result in the structure depicted on the right-hand side of the page only if a and b were both 0, which is not allowed by the present claims). Therefore, the present claims are not anticipated by the Compound 56 of the presented reference, and the rejection should be withdrawn.

CONCLUSION

Applicants therefore respectfully request that the Examiner withdraw the rejections under 35 U.S.C. §§ 102(b) and 112 and allow Claims 17 – 26 as presented herein. If the Examiner believes that personal contact would be beneficial for disposition of the present application, the Examiner is requested to contact the undersigned.

Respectfully submitted,



Kelly L. McDow-Dunham
Attorney for Applicants
Registration No. 43,787
Telephone: 513-622-0159

January 2, 2003

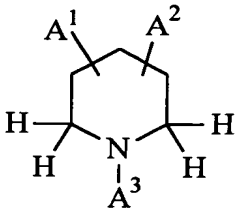
VERSION WITH MARKINGS TO SHOW CHANGES MADE

AMENDMENTS TO THE CLAIMS

Claims 1 – 16 have been cancelled.

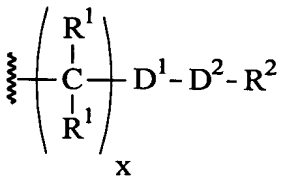
New Claim 17 has been added:

17. A compound having the structure:



or an optical isomer, diastereomer, enantiomer, or pharmaceutically-acceptable salt, or amide, ester, or imide susceptible to being cleaved *in vivo* by a mammalian subject to yield the compound, wherein:

(a) A^1 and A^2 are each, independently, selected from the group consisting of a hydrogen atom and a group having the structure:

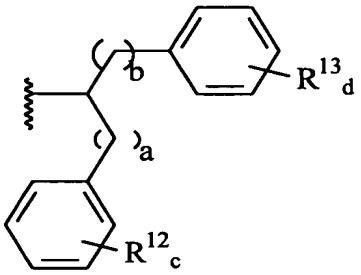


with the proviso that at A^1 and A^2 are not both hydrogen atoms, and wherein:

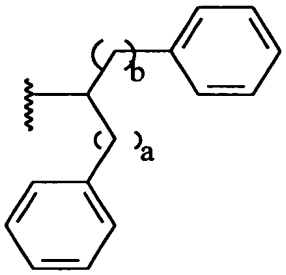
(i) each R^1 is independently selected from the group consisting of a hydrogen atom, a hydroxyl group, a hydrocarbon group, a substituted hydrocarbon group, a heterogeneous group, a substituted heterogeneous group, a carbocyclic group, a substituted carbocyclic group, a heterocyclic group, a substituted heterocyclic group, an aromatic group, a substituted aromatic group, a heteroaromatic group, and a substituted heteroaromatic group;

(ii) x is 0 or 1;

(iii) each R^2 is independently selected from the group consisting of:



and



wherein:

(a) a is at least about 2;

(b) b is at least about 2;

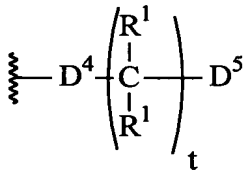
(c) c is 1 to about 3;

(d) d is 1 to about 3; and

(e) R^{12} and R^{13} are each independently selected from the group consisting of hydrocarbon groups and substituted hydrocarbon groups; and

(iv) D^1 and D^2 are each independently selected from the group consisting of -C(O)- and -NH- ; with the proviso that wherein when D^1 is -NH- then D^2 is -C(O)-, and wherein when D^2 is -NH- then D^1 is -C(O)-;

(b) A^3 has the structure:



wherein:

(i) each R^1 is independently selected from the group consisting of a hydrogen atom and a hydroxyl group;

(ii) t is from 0 to about 6;

(iii) D^4 is $-CH(R^1)-$;

(iv) D^5 is $-OR^6$; and

(v) R^6 is selected from the group consisting of a carbocyclic group, a substituted carbocyclic group, an aromatic group, and a substituted aromatic group.

New Claim 18 has been added:

18. The compound according to Claim 17 wherein x is 1.

New Claim 19 has been added:

19. The compound according to Claim 17 wherein x is 0.

New Claim 20 has been added:

20. The compound according to Claim 19 wherein D^1 is -C(O)- and D^2 is -NH-.

New Claim 21 has been added:

21. The compound according to Claim 17 wherein D^1 is -C(O)- and D^2 is -NH-.

New Claim 22 has been added:

22. The compound according to Claim 17 wherein D^1 is -NH- and D^2 is -C(O)-.

New Claim 23 has been added:

23. The compound according to Claim 17 wherein t is 0 to about 2.

New Claim 24 has been added:

24. The compound according to Claim 17 wherein R^6 is a substituted aromatic group.

New Claim 25 has been added:

25. A composition comprising:

(a) the compound according to Claim 1; and

(b) a pharmaceutically acceptable carrier.

New Claim 26 has been added:

26. A method selected from the group consisting of treating multidrug resistance, inhibiting transport protein activity, and combinations thereof, comprising administering to a mammal in need of such treatment or inhibition an effective amount of the composition according to Claim 25.